Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

CW 40: Side – Angle – Side Postulate

**Honors Geometry**

1. Sara says that the two triangles below are congruent by Side-Angle-Side. Below is her work

|  |
| --- |
| (side) (angle)  (side)  I found two pairs of congruent sides and one pair of congruent angles (shown above). Therefore the two triangles meet the Side-Angle-Side criteria and are congruent.  *Identify* and *correct* her error. |

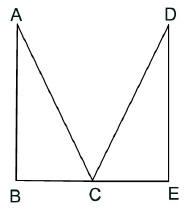
In your own words, describe what the following types of information are:

1. Given information:
2. Information from prior knowledge
3. Assumed information:
4. Jorge is completing classwork for Geometry. For each congruency statement, identify if Jorge’s statement is an assumption, prior knowledge, or given information by circling one of the options.

|  |
| --- |
| ../../../../../Desktop/Screen%20Shot%202015-12-05%20at%2012.55.48%20PMProve that ΔABC ≅ ΔDBE.  AB =BC *assumption prior knowledge given*  CB = BD *assumption prior knowledge given*  ∠ABC ≅ ∠DBE *assumption prior knowledge given*  AC = DE *assumption prior knowledge given* |

**Directions:** Determine whether enough information is given to prove that the triangles are congruent. If there is enough information, state if you would use SSS or SAS to prove these triangles congruent

|  |  |
| --- | --- |
|  |  |
| A  B  C  D  E  F  Given:  Prove: ΔCAB ≅ ΔDFE | |
| 1. Given: ,   Do and meet the SAS criteria?   * If so, **write down the corresponding sides and angle** and state how you know they are congruent. * If not, explain why not in **at least 2 sentences**. | |
| 1. Given: ,   Do and meet the SAS criteria?   * If so, **write down the corresponding sides and angles**  and state how you know they are congruent. * If not, explain why not in **at least 2 sentences**. | |

1. http://www.regentsprep.org/Regents/math/geometry/MultipleChoiceReviewG/Triang8.gif
2. What pair of corresponding sides or angles do we need to know are congruent in order to show that triangle ABC is congruent to triangle DEC using SAS?
3. Write the congruency statements necessary to prove that triangle ABC is congruent to triangle DEC?

1. Determine if the two triangles are congruent. If so write a congruency statement and identify what postulate is needed to prove congruency.

